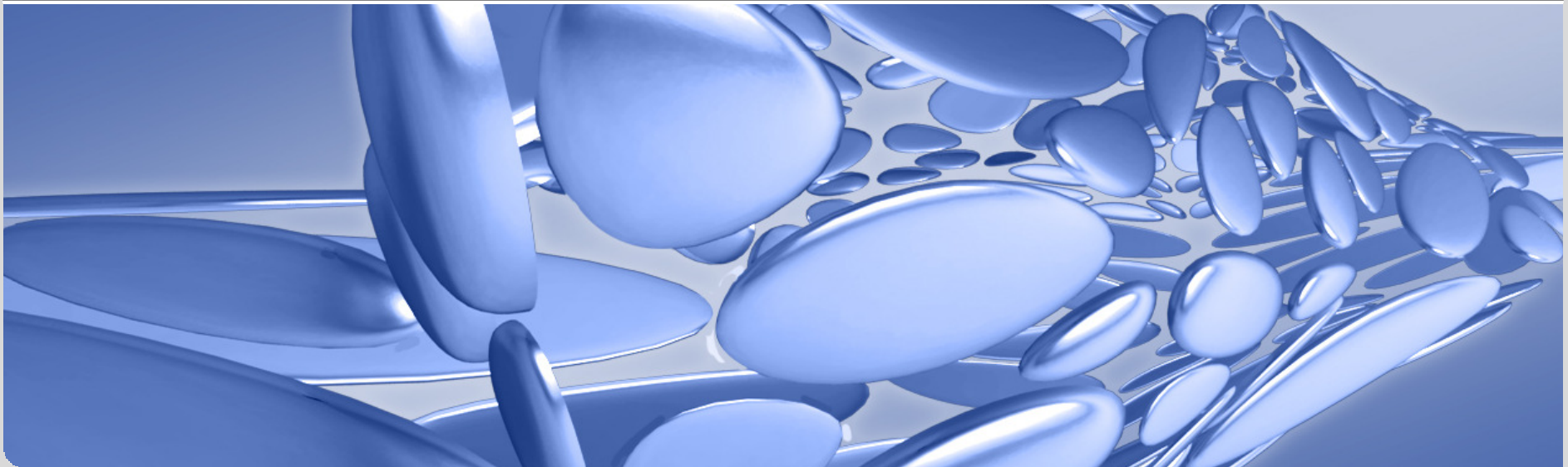


Sino-EU Engineering Education Plattform - A CLUSTER initiative

**32nd Conference of Rectors and Presidents of European Universities of Technology,
Politecnio di Milano, September 27-28, 2013**

Prof. Dr. Eberhard Umbach, President of KIT and President of CLUSTER



1. What is CLUSTER ?

Consortium **L**inking **U**niversities of **S**cience and **T**echnology for **E**ducation and **R**esearch (CLUSTER)

- Founded in 1989
- CLUSTER started with focus on **Engineering Education**
- Today, CLUSTER acts on the so-called knowledge triangle comprising **Education**, **Research** and **Innovation**.

Cluster Partners:

- 12 Partners from 17 European Countries
 - + 7 Associate Members
- Some data:
- 4.300 professors,
 - 15.500 academic staff,
 - 16.400 PhD students
 - Around 200,000 students
 - FP7 budget: ~ 700 M€,
 - ~ 1300 FP7 project participations



2. The Vision and Mission of CLUSTER



In 2008 the CLUSTER General Assembly agreed on a **VISION** and a **MISSION STATEMENT**

The **VISION for CLUSTER** is to become:

- The leading university network in technology for Research, Education and Innovation in Europe
- A central player in the development of Knowledge & Innovation Communities in Europe.
- The prime partner for Industry cooperation on the European level

The **MISSION of CLUSTER** is to:

- Enhance cooperation among members to promote exchange, cooperation and interaction between students, faculty and administrative staff
- Provide a strategic platform for joint programs within education, research and innovation for its members
- Become a strategic partner for the European Commission
- Build partnerships with major European enterprises

*One proof of Success – 7 CLUSTER Partners are involved in the EIT
Knowledge and Innovation Community (KIC) InnoEnergy*

4. The Structure of CLUSTER



Main Governing Bodies:

1. The Steering Committee meets 4 times / y (for proposing and managing actions)
2. The General Assembly meets 2 times / y (for deciding actions and reports)

Initiatives are proposed and managed by:

1. Departments (issues related to particular scientific fields)

(e.g. Mechanical Engineering, Sustainable Energy Systems, Industrial Engineering, Civil Engineering)

2. Task Forces (transversal issues)

- a) International Dimension
- b) University Management
- c) Cooperation between libraries
- d) Grants and Application Support
- e) SINO-EU Engineering Educational Platform

3. Working Groups (very specific activities with a limited duration)

- a) Dual Masters Policy Group
- b) Advisory Board (cooperation with companies)
- c) Technology Entrepreneurship

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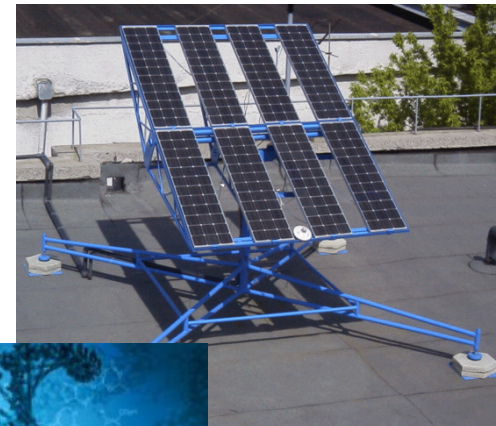
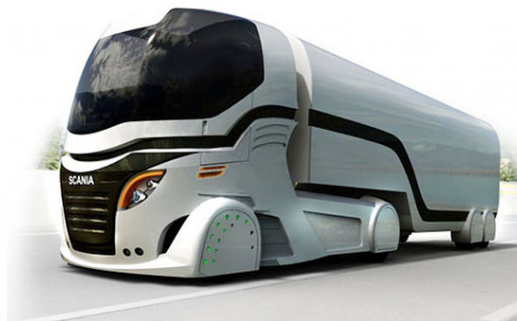
5. The Sino-European Engineering Education Platform (SEEEP or S3EP)



General Aim:

“promote substantial collaboration between Institutions of High Education in Engineering in both China and Europe in the fields of talents fostering, exchange of students, teacher training, development of teaching materials and collaboration in scientific research programs”

Focus on specific Research Areas:



5. The Sino-European Engineering Education CLUSTER Platform (S3EP)



CLUSTER

LEADING UNIVERSITIES OF
SCIENCE AND TECHNOLOGY

12 CLUSTER Universities

18 Chinese Technical Universities



6. Preparatory Meetings

1st Workshop in Shanghai – September 2010

- Establishment of a Sino-EU platform for Innovation in Engineering Education involving 30 top level Technical Universities;
- MOU between Cluster and the 18 Chinese partners.

2nd Workshop in Lisbon – May 2011

- Establishment of a strategic framework for collaboration.
- Protocol signed between CLUSTER and the Chinese Ministry of Education, on behalf of the Chinese Universities involved, defining 9 detailed action plans.

3rd Workshop in Harbin – September 2012

- Credit recognition and dual masters
- S3EP Doctoral School.
- Research priorities
- **Harbin Roadmap**



7. The Harbin Roadmap - Main Points



1. ***Sino-EU Sustainable Engineering Graduate School Program***
2. ***Sino-EU Joint Training of Master's Double Major Program***
3. ***Sino-EU PhD Summer/Winter Research and Study Camps***

7. 4th Workshop in Karlsruhe – Sept. 2013



Agreement on the first 4 Cooperation Programs (by secret voting)

1. Sino-EU Engineering Education Joint Graduate Student Supervision Programme in New and Clean Energy

Partners:

Chinese University of Petroleum

Universidad Politécnica de Cataluña (UPC)

2. Sustainable Urban Development through the Design, Planning and Construction of Large Public Buildings

Partners

South China University of Technology

Politecnico di Torino

3. Sino-EU Outstanding PhD Joint Program in Mechanical Engineering, Energy and Transportation

Partners:

Tongji University and Karlsruhe Institute of Technology (KIT)

Co-partners

Harbin Institute of Technology and Instituto Superior Técnico (IST)

4. Excellence Leading Talents Cultivation of Sustainable Energy Science and Engineering

Partners:

Zhejiang University

TU Eindhoven and Kungliga Tekniskahögskolan (KTH)

Aim: Competitive EU-funded program for EU and Chinese Technical Universities

Thank you!

